

ATEX DIRECTIVE 94/9/EC

EC Type Examination Certificate No. TRL03ATEX21032X

EC TYPE EXAMINATION CERTIFICATE



Product: 4-20 mA Temperature Transmitter
Model/Type Ref.: Temperature Transmitter – SEM210X
Temperature Transmitter – SEM205X
Brief description of the product: SEM210X and SEM205X are two wire 4-20 mA temperature transmitters that are located in a hazardous area and connect to power supplies and monitoring equipment in a safe area via a suitably certified intrinsically safe barrier or isolator
Product type: Equipment
Client name and address: Status Instruments Ltd
Green Lane Business Park, Green Lane,
Tewkesbury, Gloucestershire,
GL20 8DE, United Kingdom
Manufacturing location (see page 2 for details): Green Lane Business Park, Green Lane, Tewkesbury
Gloucestershire, GL20 8DE, United Kingdom
ATEX certification code **CE** **II 1 G** **EEx ia IIC T4..T6** Ta = -25 to + 40 ° C for T6
Ta = -25 to + 50 ° C for T5
Ta = -25 to + 85 ° C for T4

A sample of product has been tested and found to be in conformity with EN50014:1997/A2:1999, EN50020:2002, EN50284:1999 as shown in the test report (reference no: XU1062/4987).

This EC Type Examination Certificate has been established by a body notified to the Member States and Commission of the European Communities according to the provisions of Article 9 of the ATEX Directive of 23 March 1994.

This EC Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production. The manufacturer of the equipment referred to in this certificate has the responsibility to ensure that the apparatus conforms to the specification laid down in the schedule to this certificate and has satisfied the routine verifications and tests referred to therein. This certificate and its schedules may only be reproduced in its entirety and without change. Certificate issued in accordance with the ATEX Certification Scheme.

S K Barrowcliff, Director, Safety Division

Issue date: 14 January 2004

Copy No.: 1e

Distribution:
Copies 1e to Status Instruments;
Copies 2 & 3 held by TRL Compliance Services Ltd.

FULL ADDRESS OF MANUFACTURING LOCATION

Green Lane Business Park,
Green Lane,
Tewkesbury,
Gloucestershire, GL20 8DE
United Kingdom

GENERAL DESCRIPTION OF EQUIPMENT INCLUDED WITHIN THE SCOPE OF THIS CERTIFICATE

The SEM210X and SEM205X are two wire 4-20 mA temperature transmitters that accept standard temperature transducer types such as thermocouple or RTD. The apparatus comprises a small plastic enclosure with terminal connections for power, signal and transducer connections. There is a single PCB containing circuits with all capacitance adequately protected and with no inductive circuits. The PCB is potted covering all. The IP rating is deemed to be less than IP20 at the terminals.

CERTIFICATION PARAMETERS

Ui = 30 V li = 100 mA Pi = 750 mW Ci = 0 Li = 0
Uo = 30 V lo = 100 mA Po = 750 mW Co = 62 nF Lo = 4 mH

LIST OF APPROVED DRAWINGS AND DOCUMENTS

Document	Page	Date	Issue	Description
S3368-01-E-CN4146	1 of 2	06 Nov 03	D	Certification Circuit Diagram SEM210X-SEM205X
S3368-01-E-CN4146	2 of 2	06 Nov 03	D	Certification Circuit Diagram SEM210X-SEM205X
S3371-01-E-CN4090	1 of 4	17 Oct 03	D	PCB Artwork –Copper Certification Drawing SEM210X
S3371-01-E-CN4090	2 of 4	17 Oct 03	D	PCB Artwork –Copper Certification Drawing SEM210X
S3371-01-E-CN4090	3 of 4	17 Oct 03	D	PCB Artwork –Copper Certification Drawing SEM210X
S3371-01-E-CN4090	4 of 4	17 Oct 03	D	PCB Artwork –Copper Certification Drawing SEM210X
SG3-3370-01-ECN4090	1 of 1	22 Oct 03	E	SEM210X PCB Assembly Certification Drawing
52-214-2231-02	1 of 2	NA*	06	SEM205/P User instruction Sheet
52-214-2231-02	2 of 2	NA*	06	SEM205/P User instruction Sheet
52-214-2186-02	1 of 2	NA*	06	SEM210 User instruction Sheet
52-214-2186-02	2 of 2	NA*	06	SEM210 User instruction Sheet
S3372-01-03-CN4146	1 of 4	5 Nov 03	NA*	SEM210X SEM205X ASSY ITEMS LIST
S3372-01-03-CN4146	2 of 4	5 Nov 03	NA*	SEM210X SEM205X ASSY ITEMS LIST
S3372-01-03-CN4146	3 of 4	5 Nov 03	NA*	SEM210X SEM205X ASSY ITEMS LIST
S3372-01-03-CN4146	4 of 4	5 Nov 03	NA*	SEM210X SEM205X ASSY ITEMS LIST

* Denotes that the document supplied showed no data for this field.

CONDITIONS FOR MANUFACTURING

Transformer T1 must be subjected to 1500V applied between input and output winding with no breakdown of insulation between these windings and the core or screen.

SPECIAL CONDITIONS FOR SAFE USE

The equipment is to be housed in an enclosure that meets the following minimum requirements.

- 1) Enclosure to provide a minimum of IP54 ingress protection.
- 2) Enclosure must meet the requirements of EN50014:1997/A2:99 with regard to avoidance of electrostatic build-up or have adequate warnings fitted.
- 3) Enclosure must provide adequate insulation resistance per EN50014:1997/A2:99 Clause 23.4.7.8.
- 4) Enclosure must provide adequate earth continuity protection per EN50014:1997/A2:99 Clause 23.4.7.9

NOTES TO CE MARKING

Whilst CE Marking is referred to in the body of this certificate, TRL Compliance Services Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.